

CLAIMS

1. A system for managing access from a plurality of communications networks (20, 21, 22) to a mobile terminal (10) connected to a mobile telecommunications network,
5 characterized in that said system is adapted to set up at least one connection from at least one of said communications networks (20, 21, 22) to said mobile terminal (10).
- 10 2. An access management system according to claim 1, characterized in that it comprises at least one user address search interface (32) situated in said communications network (20, 21, 22) and adapted to assign at least one user address to said mobile terminal (10) on
15 the basis of data from a first command message received from at least one domain name server (31) situated in said communications network (20, 21, 22).
3. An access management system according to claim 2,
20 characterized in that said user address search interface (32) is connected to said domain server (31) in said communications network (20, 21, 22).
4. An access management system according to any one of
25 claims 1 to 3, characterized in that said system comprises at least one incoming call management interface (34) situated in said communications network (20, 21, 22) and adapted to assign at least one network address to said mobile terminal (10) after processing of said user
30 address on the basis of data from a second command message received from said user address search interface (32).
5. An access management system according to claim 4,
35 characterized in that said incoming call request management interface (34) is connected to at least one network address assignment server (33) in said

communications network (20, 21, 22).

6. An access management system according to any one of claims 1 to 5, characterized in that it comprises at least one access control interface (35) situated in said communications network (20, 21, 22) and adapted to verify said user address of said mobile terminal (10) on the basis of data from a third command message received from said incoming call request management interface (34).
7. An access management system according to claim 6, characterized in that said access control interface (35) is connected to said network address assignment server (33) in said communications network (20, 21, 22).
8. An access management system according to any one of claims 1 to 7, characterized in that said system comprises at least one access authorization interface (14) situated in said mobile telecommunications network and adapted to verify said network address after processing of said user address of said mobile terminal (10) on the basis of data from a fourth command message received from said access control interface (35).
9. An access management system according to claim 8, characterized in that said access authorization interface (14) is connected to at least one home location register (13) in said mobile telecommunications network.
10. A user search address interface (32) situated in one of said communications networks (20, 21, 22) associated with said access management system according to any one of claims 1 to 9, characterized in that said interface comprises means for sending to said domain name server (31), means for sending to said incoming call request management interface (34), means for assigning a user address, means for formatting a command message, and

means for generating a failure message.

11. An incoming call request management interface (34) situated in one of said communications networks (20, 21, 22) associated with said access management system according to any one of claims 1 to 9, characterized in that said interface comprises means for sending to said network address allocation server (33), means for sending to said user address search interface (32), means for assigning a network address, means for formatting a command message, means for verifying the existence of a user address, means for verifying the accessibility and the rights of said user of said mobile terminal (10), and means for generating a failure message.

12. An access control interface (35) situated in one of said communications networks (20, 21, 22) associated with said access management system according to any one of claims 1 to 9, characterized in that said interface comprises means for sending to said network address assignment server (33), means for sending to said access authorization interface (14), means for verifying said user address of said mobile terminal (10), means for formatting a command message and means for processing said user address.

13. An access authorization interface (14) situated in said mobile communications network associated with said access management system according to any one of claims 1 to 9, characterized in that said interface comprises means for sending to said home location register (13), means for sending to said access control interface (35), means for processing said user address, means for verifying said network address, and means for formatting a command message.

14. A method of managing access from a plurality of

communications networks (20, 21, 22) to a mobile terminal (10) connected to a mobile telecommunications network, characterized in that it comprises the following steps:

- identifying at least one mobile terminal (10) to
5 which one of said communications networks (20, 21, 22) is to set up a connection,
- assigning at least one user address to said mobile terminal (10),
- assigning at least one network address to said
10 communications network (20, 21, 22),
- verifying said user address of said mobile terminal (10) to enable simultaneous connection to a plurality of communications networks (20, 21, 22),
- verifying said network address of said
15 communications network (20, 21, 22) to enable access to said mobile communications network,
- verifying said accessibility and said access rights of said user of said mobile terminal (10) to access said communications network (20, 21, 22),
- 20 - setting up a connection from said communications network (20, 21, 22) to said mobile terminal (10) to send at least one data item with said user address.

15. An access management method according to claim 14,
25 characterized in that it comprises the following steps:

- storing at least one identifier corresponding to at least one mobile terminal (10) in at least one application server (30) of one of said communications networks (20, 21, 22),
- 30 - sending a first command message to request identification of said mobile terminal (10) from said application server (30) to at least one domain name server (31) of said communications network (20, 21, 22),
- sending said first command message from said
35 domain name server (31) to at least one user address search interface (32) of said communications network (20, 21, 22) to assign at least one user address to said

mobile terminal (10),

- sending a second command message for assigning at least one network address with said user address of said mobile terminal (10) from said user address search

5 interface (32) to at least one incoming call request management interface (34) of said communications network (20, 21, 22),

- verifying the existence of the received user address in said call request management interface (34)

10 connected to at least one network address assignment server (33).

16. An access management method according to claim 15, characterized in that, when said user address exists,
15 said incoming call request management interface (34) sends at least one message to advise the existence of said address to said user address search interface (32).

17. An access management method according to claim 15, characterized in that, when said user address does not
20 exist, said incoming call request management interface (34) sends a third command message to at least one access control interface (35) via said network address assignment server (33) of said communications network
25 (20, 21, 22).

18. An access management method according to any one of claims 14 to 17, characterized in that said method includes the steps of:

30 - sending a fourth command message to process said user address from said access control interface (35) to at least one access authorization interface (14) situated in said mobile telecommunications network,

- verifying said accessibility and said rights of
35 said user of said mobile terminal (10) in at least one home location register (13) of said mobile telecommunications network connected to said access

authorization interface (14),

- sending said accessibility and said rights of said user of said mobile terminal (10) from said access authorization interface (14) situated in said

5 telecommunications network to said access control interface (35) situated in said communications network (20, 21, 22), for formatting said data,

- sending said accessibility and said rights of said user of said mobile terminal (10) from said access
10 control interface (35) to said incoming call request management interface (34) via said network address assignment server (33) of said communications network (20, 21, 22) for analysis.

15 19. An access management method according to claim 18, characterized in that, in the event of non-accessibility or of absence of rights for said user of said mobile terminal (10), said incoming call request management interface (34) sends a first failure message to said user
20 address search interface (32), after which said user address search interface (32) forwards said first failure message to said domain name server (31) and to said application server (30) for processing, so as not to set up the connection between said communications network
25 (20, 21, 22) and said mobile terminal (10).

20. An access management method according to claim 18, characterized in that, in the event of accessibility or of existence of rights for said user of said mobile
30 terminal (10), said incoming call request management interface (34) sends a user address from said incoming call request management interface (34) to said user address search interface (32).

35 21. An access management method according to any one of claims 14 to 20, characterized in that said method includes the following steps:

- sending said user address from said user address search interface (32) to said domain name server (31) and thence to said application server (30),

- sending data with said user address from said application server (30) to at least one access management equipment (12) of said mobile telecommunications network.

22. An access management method according to claim 21, characterized in that, if said user address is not recognized, said access management equipment (12) sends a fifth command message to said network address assignment server (33) for verification, after which said network address assignment server (33) sends said address to said incoming call request management interface (34).

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23. An access management method according to claim 21 or claim 22, characterized in that said method includes the following steps:

- sending a second failure message from said incoming call request management interface (34) to said network address assignment server (33) and thence to said access management equipment (12) if said network address has not been assigned,

- processing said second failure message in said access management equipment (12) so as not to set up a connection between said communications network (20, 21, 22) and said mobile terminal (10).

24. An access management method according to claim 21, characterized in that, in the event of recognition of said user address, said access management equipment (12) sends said data to at least one service support equipment (11) and thence to said mobile terminal (10) after the connection is set up between said communications network (20, 21, 22) and said mobile terminal (10).